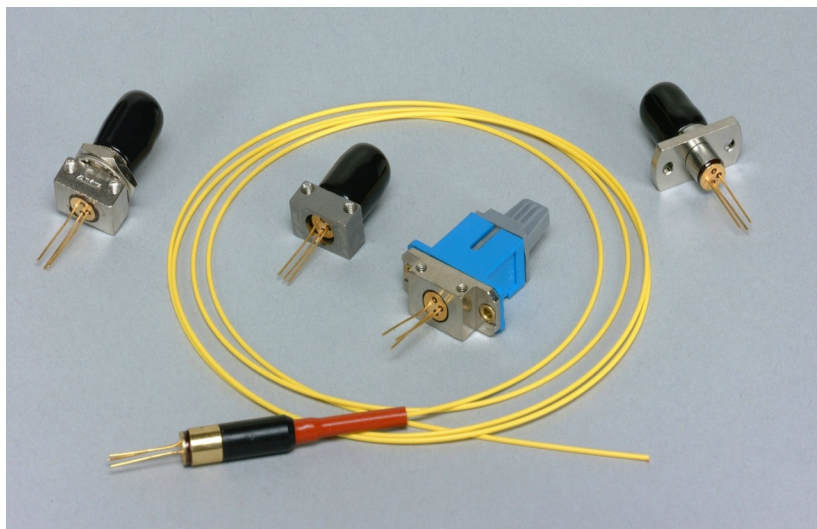




1mm Diameter InGaAs PhotoDiodes



PD-LD Inc. offers a variety of standard and custom large active area InGaAs PIN Photodiodes in fiber coupled packages, of proven manufacture and design. InGaAs is optimal from 1000 to 1650nm . All devices are RoHS-compliant and are available in fiber pigtailed coaxial packages or in connector style receptacle packages.



Features

- 1mm Active Area
- InGaAs PIN Photodiode

Manufacturing

PD-LD Inc. maintains a large inventory of the most popular detector sizes and pin-outs. Efficient package designs and manufacturing processes allow PD-LD to rapidly support both small and large volume requirements. Complete 100% testing of all critical parametric device values ensure optimal performance and quality. Not all receptacle packaging styles are represented on this data sheet, so please contact PD-LD for specific needs.

Performance Specifications: Examples (more options available)

| PDINBO Series InGaAs PIN Photodiode | | | | | |
|-------------------------------------|-------|------|---------|------|--|
| Parameter | Unit | Min. | Typical | Max | Test Conditions |
| Wavelength | nm | 1000 | | 1650 | |
| Active Area | mm | | 1 | | |
| Responsivity | A/W | 0.85 | 0.90 | | V _r =5V 1550nm |
| Dark Current | nA | | | 5 | V _r =5V, T _c =25°C |
| Capacitance | pF | | 100 | | V _r =5V |
| Shunt Resistance | M Ohm | 10 | | | |
| Bandwidth | MHz | 30 | | | V _r =5V |



1mm Diameter InGaAs PhotoDiodes

Packaging Options

Pigtailing

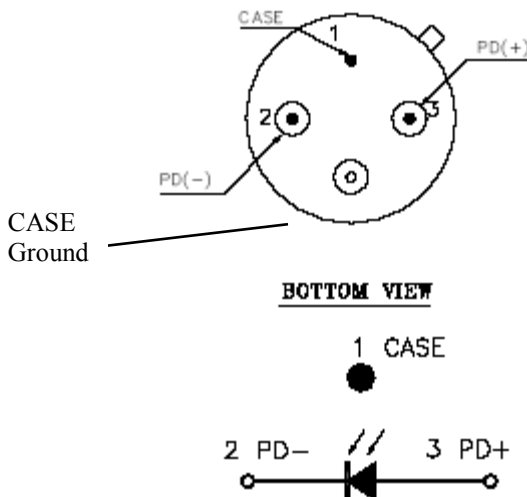
Devices can be pigtailed with any size optical fiber that is compatible with its active area size. Pigtails may range in core size from 3 um to 200 micron. One meter is the standard length, but any length or connector termination may be specified. Pigtails may be terminated with ST, FC, SC and LC connectors with either PC or APC polish.

Receptacles

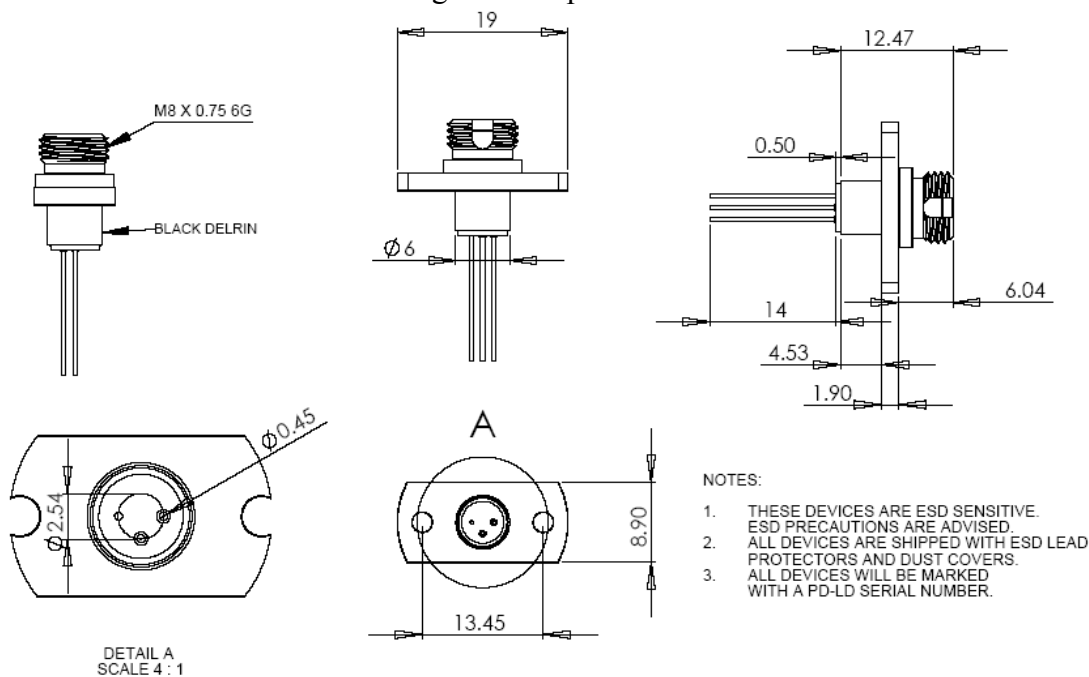
Standard ST, FC and SC housings are available in both panel and board mountable versions.

These receptacles can be optimized for use with both single mode and multimode optical fibers.

Pinout & Mechanical Dimensions (mm)



Mechanical Drawing FC Receptacle Panel



InGaAs Absolute Maximum Ratings ($T_c=25^\circ\text{C}$)

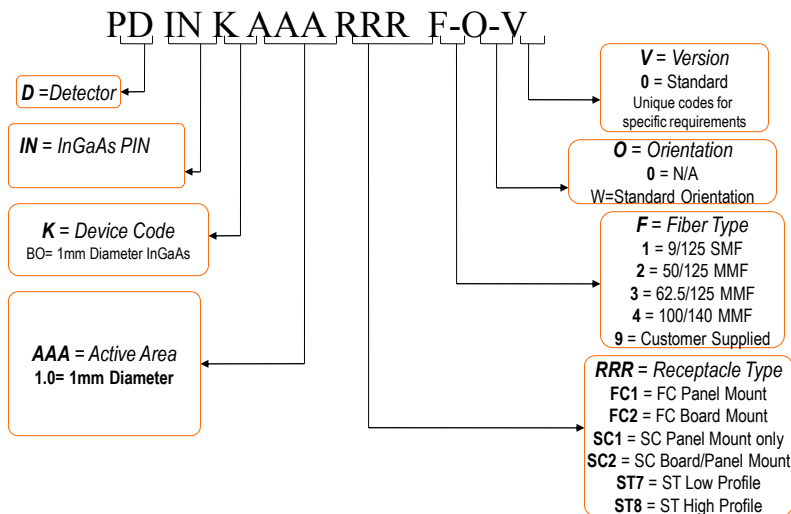
| Parameter | Symbol | Value | Unit |
|-----------------------|-----------|-----------|-----------------------------|
| Reverse Voltage | V_R | 10 | V |
| Forward Current | I_F | 10 | mA |
| Operating Temperature | T_{OPR} | -40 to 85 | $^\circ\text{C}$ |
| Storage Temperature | T_{STR} | -40 to 85 | $^\circ\text{C}$ |
| Input Optical Power | P | 10 | mW |
| Soldering Temperature | | 260/10 | $^\circ\text{C}/\text{sec}$ |



1mm Diameter InGaAs PhotoDiodes

Ordering Information

Data Legend: Receptacle 1mm InGaAs Photodiodes



Data Legend: Pigtailed 1mm InGaAs Photodiodes

